SUB-PHASE	SUB-PHASE DURATION [s]	FREQUENCY [Hz]	PULSE WIDTH [μs]	BIOREACTION [μs]
1	20	1	10	999990
2	5	1	20	999980
3	3	1	40	999960
4	1	2	40	499960
5	1	3	40	333293
6	1	4	40	249960
7	1	5	40	199960
8	1	6	40	166627
9	1	7	40	142817
10	1	8	40	124960
11	1	9	40	111071
12	1	19	40	52592
13	1	29	40	34443
14	4	1	10	999990
15	2	1	20	999980
16	2	1	40	999960
17	1	2	40	499960
18	2	3	40	333293
19	1	4	40	249960
20	2	5	40	199960
21	1	6	40	166627
22	2	7	40	142817
23	1	8	40	124960
24	2	9	40	111071
25	1	19	40	52592
26	1	29	40	34443
27	1	39	40	25601

Fig. 1

SUB-PHASE	SUB-PHASE DURATION [s]	FREQUENCY [Hz]	PULSE WIDTH [μs]	BIOREACTION [μs]
1	20	1	10	999990
2	3	1	20	999980
3	3	1	40	999960
4	1	2	40	499960
5	1	3	40	333293
6	1	4	40	249960
7	1	5	40	199960
8	4	6	20	166647
9	4	6	40	166627
10	4	6	20	166647
11	4	6	40	166627
12	4	7	20	142837
13	4	7	40	142817
14	4	7	20	142837
15	4	7	40	142817
16	1	8	40	124960
17	1	9	40	111071
18	1	19	40	52592
19	1	29	40	34443

Fig. 2

			Sequences of muscular relaxation			Sequences of microcirculatory system activation				Freq. 100 Hz – Width 40 μs		
Time [minutes]	-10	-5	0	1	2	3	4	5	7	10	20	40
VEGF values [pg/ml] in healthy subjects	25,0	21,0	23,0	32,0	61,0	63,0	82,0	82,0	101,0	103,0		
VEGF values [pg/ml] in patients affected by vascular pathology	17,7	31,0	31,1	19,7	22,3	19,0	27,3	34,3	44,7	42,3	33,2	40,2
VEGF values [pg/ml] in diabetic patients affected by vascular pathology	20,0	34,0	35,0	19,0	21,0	44,0	50,0	58,2	60,0	61,0	39,1	42,0

Fig. 5

SUB-PHASE	SUB-PHASE DURATION [s]	FREQUENCY [Hz]	PULSE WIDTH [μs]	BIOREACTION [μs]
1	20	1	10	999990
2	5	1	20	999980
3	3	1	40	999960
4	1	2	40	499960
5	1	3	40	333293
6	1	4	40	249960
7	1	5	40	199960
8	1	6	40	166627
9	1	7	40	142817
10	1	8	40	124960
11	1	9	40	111071
12	1	19	40	52592
13	8	1	10	999990
14	4	1	20	999980
15	2	1	30	999970
16	1	1	40	999960
17	8	2	40	499960
18	4	3	40	333293
19	2	4	40	249960
20	1	5	40	199960
21	8	6	10	166657
22	4	6	20	166647
23	2	6	30	166637
24	1	6	40	166627
25	8	7	40	142817
26	4	8	40	124960
27	2	9	40	111071
28	1	10	40	99960
29	4	11	20	90889
30	4	11	40	90869
31	4	11	20	90889
32	4	11	40	90869
33	4	11	20	90889
34	4	11	40	90869
35	4	11	20	90889
36	4	11	40	90869
37	4	11	20	90889
38	4	11	40	90869
39	1	21	40	47579
40	1	31	40	32218
41	1	41	40	24350

Fig. 3

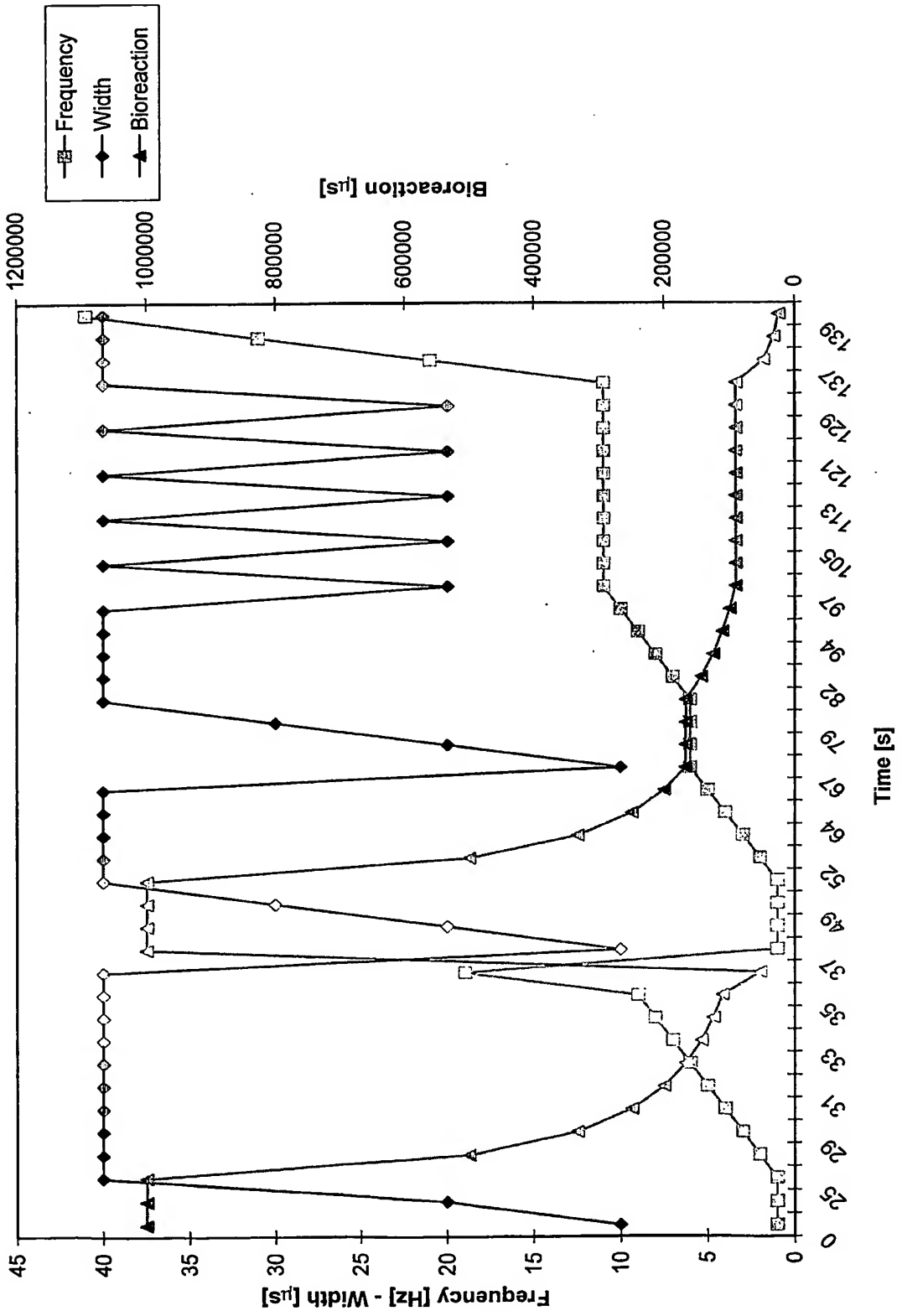
Frequency
Width
Bioreaction
Bioreaction [µs]
1200000
1000000
800000
600000
400000
200000
0
Frequency [Hz] - Width [µs]
45
40
35
30
25
20
15
10
5
0
Time [s]
0
25
29
33
37
41
45
49
52
56
60
64
67
71
75
79
82
86
90
94
97
101
105
109
113
116
120
124
127
131
135
139

Fig. 4

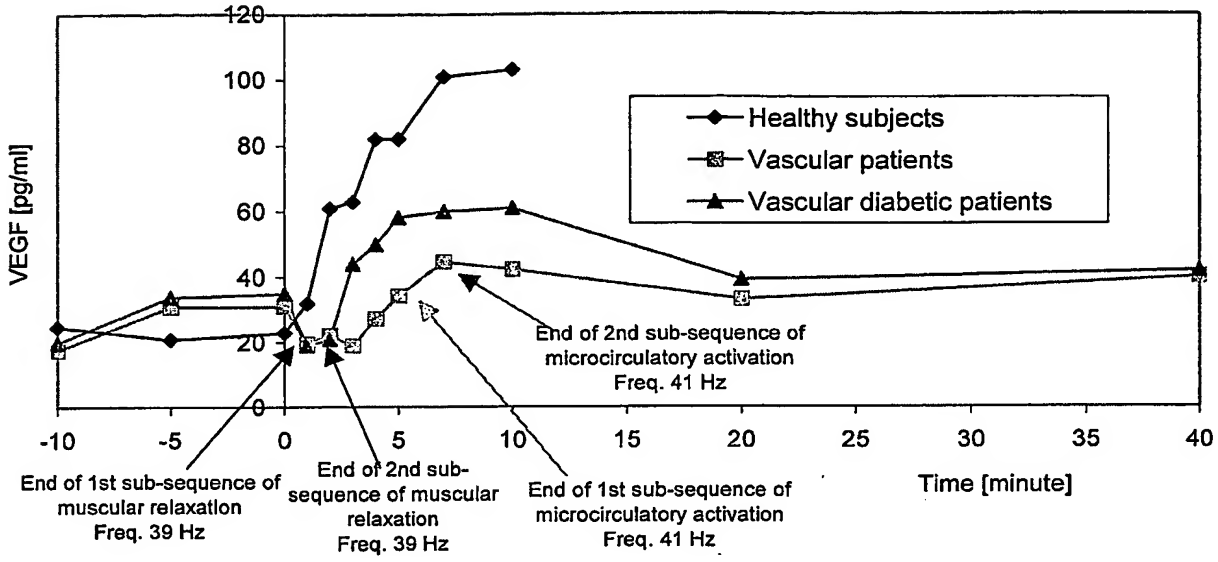
VEGF [pg/ml]
120
100
80
60
40
20
0
-10
-5
0
5
10
15
20
25
30
35
40
Time [minute]
Healthy subjects
Vascular patients
Vascular diabetic patients
End of 2nd sub-sequence of microcirculatory activation Freq. 41 Hz
End of 1st sub-sequence of muscular relaxation Freq. 39 Hz
End of 2nd sub-sequence of muscular relaxation Freq. 39 Hz
End of 1st sub-sequence of microcirculatory activation Freq. 41 Hz

Fig. 6

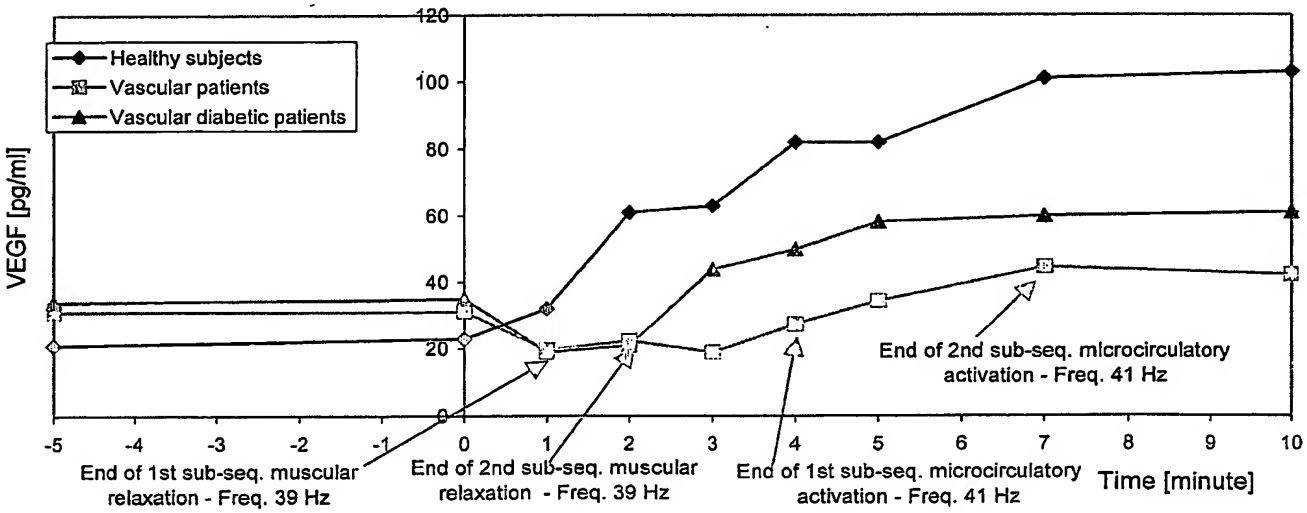
VEGF [pg/ml]
120
100
80
60
40
20
0
-5
-4
-3
-2
-1
0
1
2
3
4
5
6
7
8
9
10
Time [minute]
Healthy subjects
Vascular patients
Vascular diabetic patients
End of 2nd sub-seq. microcirculatory activation - Freq. 41 Hz
End of 1st sub-seq. muscular relaxation - Freq. 39 Hz
End of 2nd sub-seq. muscular relaxation - Freq. 39 Hz
End of 1st sub-seq. microcirculatory activation - Freq. 41 Hz

Fig. 7

SUB-PHASE	SUB-PHASE DURATION [s]	FREQUENCY [Hz]	PULSE WIDTH [μs]	BIOREACTION [μs]
1	30	1	1	999990
2	5	1	2	999980
3	5	1	4	999960
4	1	2	4	499960
5	1	3	4	333293
6	1	4	4	249960
7	1	5	4	199960
8	1	6	4	166627
9	1	7	4	142817
10	1	8	4	124960
11	1	9	4	111071
12	30	11	2	90889
13	4	11	4	90869
14	30	11	2	90889
15	4	15	4	66627
16	2	16	4	62460
17	2	19	4	52592
18	30	1	1	999990
19	5	1	2	999980
20	5	1	4	999960
21	1	2	4	499960
22	1	3	4	333293
23	1	4	4	249960
24	1	5	4	199960
25	1	6	4	166627
26	1	7	4	142817
27	1	8	4	124960
28	1	9	4	111071
29	1	19	4	52592
39	8	1	1	999990
30	4	1	2	999980
31	2	1	3	999970
32	1	1	4	999960
33	8	2	4	499960
34	4	3	4	333293
35	2	4	4	249960
36	1	5	4	199960
37	8	6	1	166657
38	4	6	2	166647
39	2	6	3	166637

Fig. 8

SUB-PHASE	SUB-PHASE DURATION [s]	FREQUENCY [Hz]	PULSE WIDTH [μs]	BIOREACTION [μs]
40	1	6	4	166627
41	8	7	4	142817
42	4	8	4	124960
43	2	9	4	111071
44	1	10	4	99960
45	4	11	2	90889
46	4	11	4	90869
47	4	11	2	90889
48	4	11	4	90869
49	4	11	2	90889
50	4	11	4	90869
51	4	11	2	90889
52	4	11	4	90869
53	4	11	2	90889
54	4	11	4	90869
55	1	21	4	47579
56	1	31	4	32218
57	1	41	4	24350
58	60	2	1	499990
59	30	2	2	499980
60	15	2	4	499960
61	30	4	4	249960
62	1	8	2	124980
63	1	16	1	62490
64	1	8	2	124980
65	1	4	4	249960
66	30	6	4	166627
67	2	12	2	83313
68	2	24	2	41647
69	2	24	2	41647
70	2	24	3	41637
71	2	24	4	41627
72	30	30	4	33293
73	20	40	4	24960
74	60	50	4	19960
75	30	60	4	16627
76	60	90	4	11071
77	60	130	4	7652
78	40	160	4	6210
79	1	200	4	4960
80	120	220	4	4505

Fig. 9